UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET, S.W.
ATLANTA, GEORGIA 30303-8960

January 25, 2018

(b)(6)
[redacted]

SUBJ: EPA Asbestos Removal at 319 Sloan Street

Dear (b)(6) :

Enclosed, you will find the Removal Action Status Report for the property located at 319 Sloan Street in Davidson, North Carolina. The report summarizes information regarding the original asbestos sampling, a description of the Removal Action conducted on the property, a summary of multimedia sampling results, details on the restoration of the property and the timeframe of the Removal Action. We have also included a figure of the removal area and the air sampling locations, a table of the air sampling results and photographs of the removal activities.

The removal activities have been completed and there are no further actions needed on the above-mentioned property. If you have any questions or need further information, please do not hesitate to contact Jordan Garrard, US EPA, Federal On-Scene Coordinator directly at (678) 644-8648, via email: garrard.jordan@epa.gov or myself directly at (678) 575-8132, via email: miller.angela@epa.gov, at any time.

It was such a pleasure working with you and your community. Thank you for your cooperation and patience throughout the removal activities.

Sincerely,

Angela R. Miller, US EPA
Community Involvement Coordinator

Enclosure(s)

cc: Jordan Garrard, US EPA, Federal On-Scene Coordinator
Miguel Alvalle, NC DEQ

REMOVAL ACTION STATUS REPORT
DAVIDSON ASBESTOS

Property Address: 315 and 319 Sloan Street, Davidson, Mecklenburg County, North Carolina

Original Asbestos Sampling Information: Surface soil samples were collected at a depth of 0 to 3 inches below ground surface (bgs) and subsurface soil samples were collected at a depth of 3 to 6 inches bgs. Analytical results are reported in increments of 0.25 percent asbestos. Those samples with analytical results reported as "trace" (less than 0.25 percent asbestos) were further analyzed by fluidized bed analysis and reported in soil concentrations of phase contrast microcopy equivalent (PCME) structures per gram (s/g).

Property Address	Area Sampled	Surface Soil Results (percent asbestos) 0-3 inches deep	Subsurface Soil Results (percent asbestos) 3-6 inches deep
319 Sloan Street	Front Yard	No Asbestos Detected	0.0 s/g
	Back Yard	1.5	0.0 s/g

Description of Removal Action: The soil was excavated to an approximate maximum depth in the following areas: driveway of 315 Sloan Street to 24 inches; back yard and driveway of 319 Sloan Street to 12 inches; and, tree line and residential drip line areas of 319 Sloan Street to 3 inches (See Appendix 1). Visual inspections of the excavated areas for asbestos-containing materials (ACM) were conducted by a State of North Carolina-accredited asbestos inspector and air monitor. Additional removal was conducted in those areas where ACM were still visibly present. Once ACM was no longer visibly present at 319 Sloan Street, restoration of the areas excavated was were allowed to commence. ACM was still visibly present in the driveway of 315 Sloan Street. The remaining ACM was photographed and documented in the site logbook before restoration began.

Summary of Multimedia Sampling Results: Perimeter air sampling was conducted at six stationary locations during removal activities from June 13 through June 14, 2017. Air sampling was conducted daily at three to four of those locations as weather permitted and based on wind direction and removal activities. The analytical results were less than the limit of detection and ranged from less than 0.00015 fibers per cubic centimeter (f/cc) to less than 0.00066 f/cc (see Table 1 in Appendix 2). A five-point composite soil sample was collected from the front yard and driveway of 315 and 319 Sloan Street before restoration began, and the analytical result detected a trace amount of chrysotile asbestos. A 12-point composite soil sample was collected from the driveway located between 315 and 319 Sloan Street and the back yard of 319 Sloan Street before restoration began, and analytical results indicated no asbestos detected (see Table 2 in Appendix 2).

Perimeter air sampling and composite soil sampling were conducted by a State of North Carolina-accredited air monitor with oversight from a State of North Carolina-accredited supervising air monitor (SAM).

Restoration of Property: Restoration work included following activities: installation of snow fencing on top of the subsurface of the excavated driveway and back yard of 319 Sloan Street; backfill, topsoil, and sod in the back yard of 319 Sloan Street; backfill and rock in the driveway

of 319 Sloan Street; and installation of snow fencing on top of the subsurface and around the sides of the excavated driveway, backfill, and rock at 315 Sloan Street. All areas were restored to the original height of the surrounding grade.

Time Frame of Removal Action: Removal activities began on June 12, 2017, and were completed on June 14, 2017.

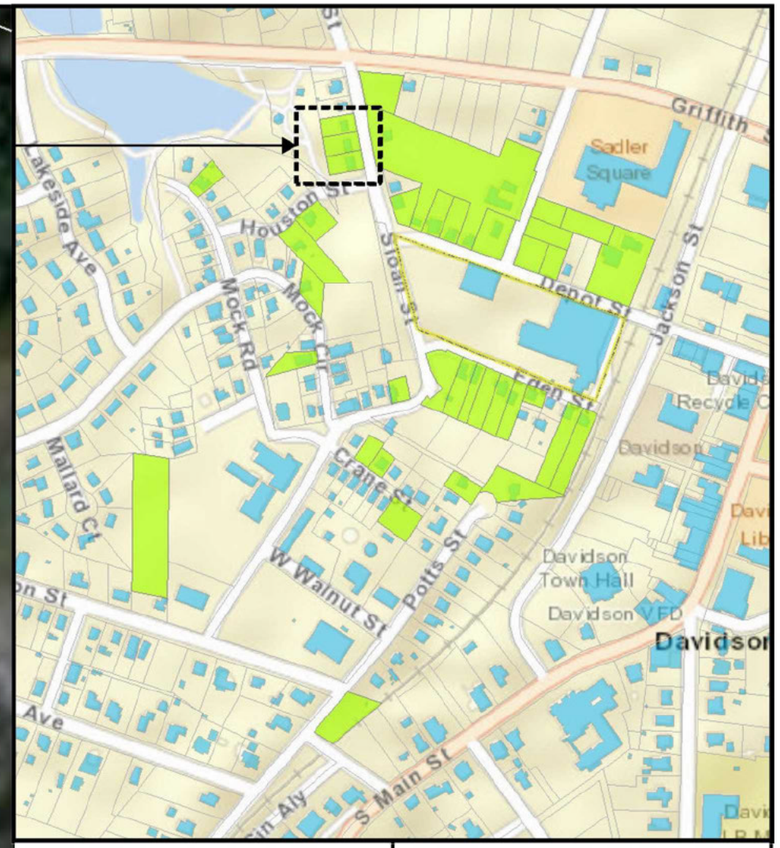
Appendices to this report include:

1. Figure of removal area and air sampling locations
2. Tables of air and soil sampling results
3. Photographic log of removal activities

APPENDIX 1

FIGURE

(One Page)



Legend

- Air Sample
- Removal Area
- Parcel Boundary
- Approximate Site Boundary

Inset Map

- *Parcels with Removal Activities*
- Building/Structure

319 Sloan Street

N
W E
S

0 20 40
Feet

Map Sources:
Aerial Imagery, Bing Maps, 2012-2014;
Parcels, http://maps.co.mecklenburg.nc.us

United States Environmental Protection Agency Region 4

FIGURE 1

Removal Areas and
Air Sampling Locations

TDD Name: Davidson Asbestos

TDD No.: TT-01-071

City:	**County:**	**State:**
Davidson	Mecklenburg	North Carolina

TETRA TECH

Date: 9/21/2017

Analyst: dale.vonbusch

File: C:\TT-01-071_Davidson_Asbestos\mxd\acm_working_mapbook_v3.mxd

APPENDIX 2

SUMMARY TABLE OF ANALYTICAL RESULTS

(Two Pages)

TABLE 1
TRANSMISSION ELECTRON MICROSCOPY RESULTS
DAVIDSON ASBESTOS
DAVIDSON, MECKLENBURG COUNTY, NORTH CAROLINA

Sample Id	Location	T	Pump No.	Time Start	Time Stop	Total (Min)	Pump Flow Rate (lpm)			Total Sample Volume (l)	PCM Results (f/cc)	Asbestos Fibers Detected	TEM Results in PCME (f/cc)
							Initial	Final	Average				
DA-319SS-AA-L01-061317	319 Sloan Street - Location 1	AA	G6	8:09	14:49	400	11.40	11.57	11.49	4594.0	0.00059	0	<0.0002
DA-319SS-AA-L02-061317	319 Sloan Street - Location 2	AA	G4	8:12	14:51	399	11.25	11.39	11.32	4516.7	0.0006	0	<0.0003
DA-319SS-AA-L03-061317	319 Sloan Street - Location 3	AA	G1	8:31	14:55	384	11.56	11.55	11.56	4437.1	0.00061	0	<0.00015
DA-319SS-AA-L04-061317	319 Sloan Street - Location 4	AA	G3	8:18	14:09	351	11.33	11.15	11.24	3945.2	0.00075	0	<0.00038
DA-319SS-AA-L05-061417	319 Sloan Street - Location 5	AA	G6	8:40	14:43	363	11.57	11.00	11.29	4096.5	0.00066	0	<0.00066
DA-319SS-AA-L06-061417	319 Sloan Street - Location 6	AA	G5	8:32	15:32	420	11.40	11.34	11.37	4775.4	0.00072	0	<0.00036

Notes:

<: Less than
AA: Area air sampling
DA: Davidson Asbestos
f/cc: Fibers per cubic centimeter
Id: Identification
l: Liters
lpm: Liters per minute
Min: Minutes
PCM: Phase contrast microscopy
PCME: Phase contrast microscopy equivalent
SS: Sloan Street
TEM: Transmission electron microscopy

TABLE 2
SOIL SAMPLING RESULTS
DAVIDSON ASBESTOS
DAVIDSON, MECKLENBURG COUNTY, NORTH CAROLINA

Sample Id	Sample Location	Date Sampled	Type of Sample	Percent Asbestos Detected By Visual Estimate	Percent Asbestos Detected By Point Count*
DA-319SS-AS-061417	319 Sloan Street	6/14/2017	Composite (12 pt)	NAD	NAD
DA-315SS-AS-061417	315 Sloan Street	6/14/2017	Composite (5 pt)	<1	Trace Chrysotile Asbestos

*Modification of the method with regards to point counting shows a results of "Trace" where asbestos is observed, but no points land on an asbestos fiber.

Notes:

<: Less than
AS: Asbestos soil sample
DA: Davidson Asbestos
Id: Identification
NAD: No asbestos detected
pt: Point
SS: Sloan Street

APPENDIX 3

PHOTOGRAPHIC LOG

(11 Pages)

OFFICIAL PHOTOGRAPH NO. 1
U.S. ENVIRONMENTAL PROTECTION AGENCY

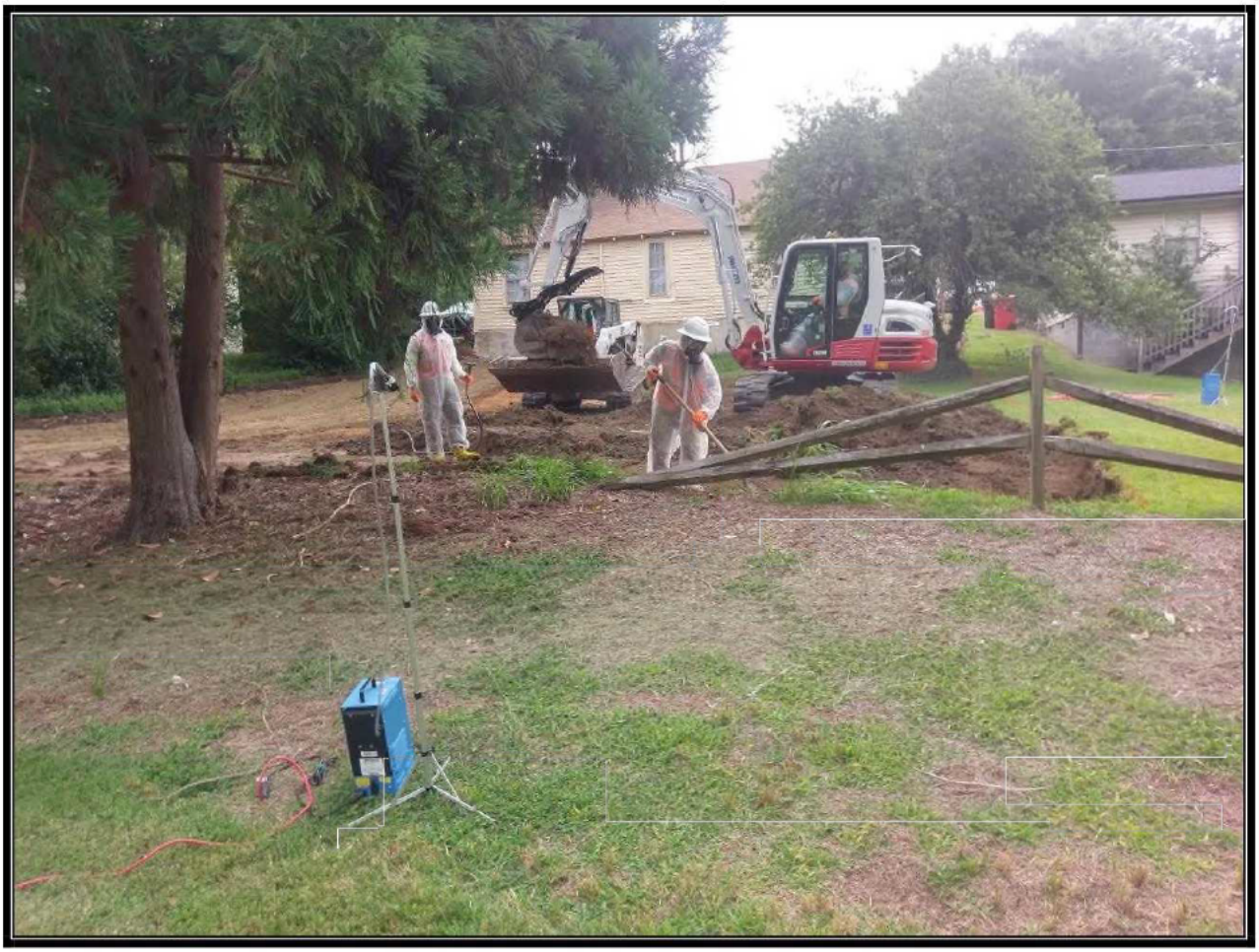
TDD Number:	TT-01-071	**Location:**	Davidson Asbestos
Orientation:	Southeast	**Date:**	June 13, 2017
Photographer:	Paul Prys, Tetra Tech, Inc. (Tetra Tech)	**Witness:**	None

Subject: The Emergency and Rapid Response Services (ERRS) contractor, Environmental Restoration, LLC (ER), used an excavator and hand tools to remove asbestos-containing materials (ACM) and asbestos-contaminated soil from the property located at 319 Sloan Street. ER used hoses to wet the asbestos-contaminated soil and spread plastic sheeting under the dump trucks to prevent asbestos-contaminated soil from falling onto the sidewalk and the road during removal activities.

OFFICIAL PHOTOGRAPH NO. 2
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number:	TT-01-071	**Location:**	Davidson Asbestos
Orientation:	North	**Date:**	June 14, 2017
Photographer:	Paul Prys, Tetra Tech, Inc. (Tetra Tech)	**Witness:**	None

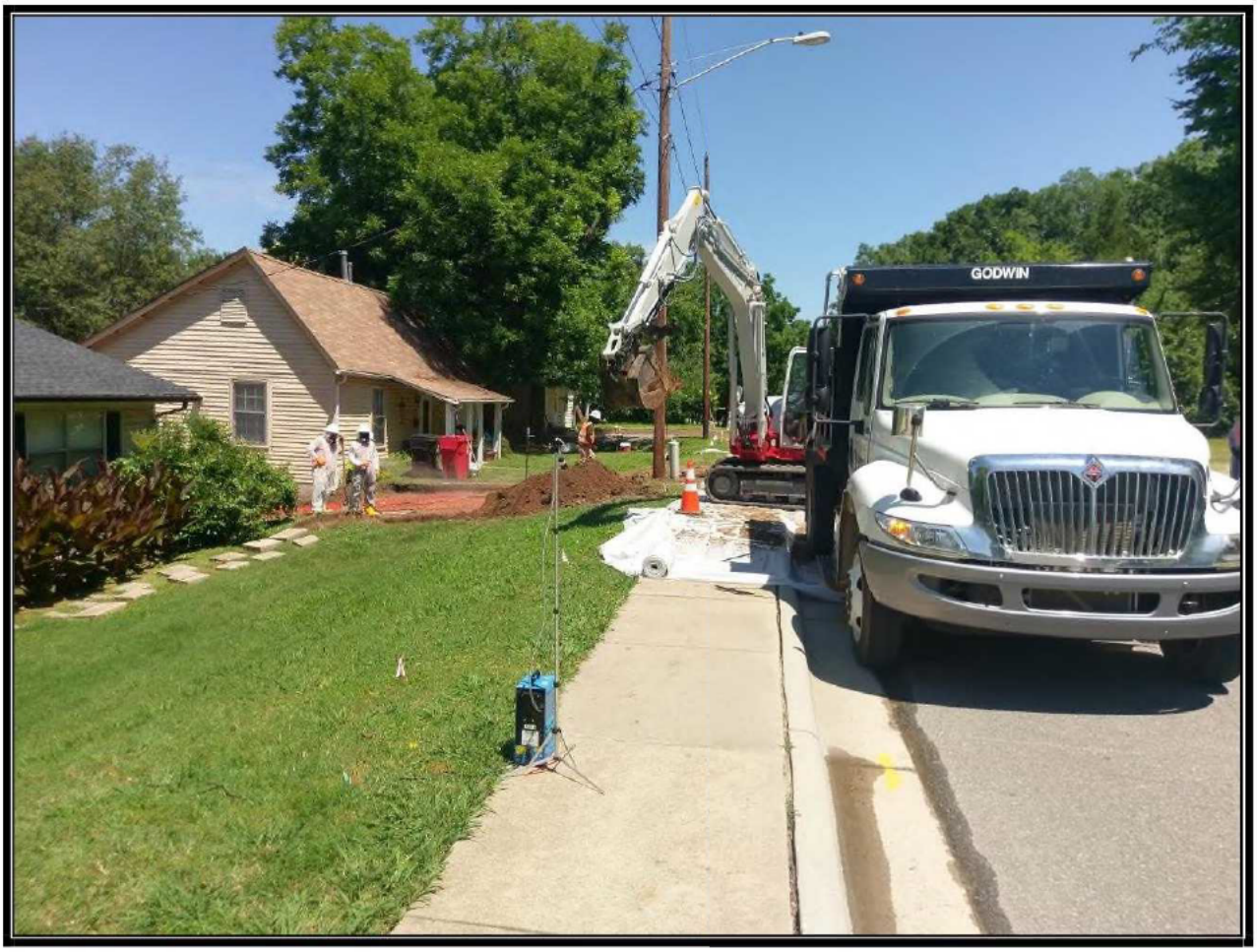
Subject: ER used an excavator and hand tools to remove ACM and asbestos-contaminated soil from the property located at 315 Sloan Street. ER used hoses to wet the asbestos-contaminated soil during removal activities.



OFFICIAL PHOTOGRAPH NO. 3
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number:	TT-01-071	**Location:**	Davidson Asbestos
Orientation:	East	**Date:**	June 13, 2017
Photographer:	Paul Prys, Tetra Tech	**Witness:**	None

Subject: Perimeter air sampling was conducted by a Tetra Tech Superfund Technical Assessment and Response Team (START), State of North Carolina-accredited air monitor to evaluate the effectiveness of engineering and safety controls in preventing off-site migration of asbestos fibers during removal activities at 319 Sloan Street.



OFFICIAL PHOTOGRAPH NO. 4
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number:	TT-01-071	**Location:**	Davidson Asbestos
Orientation:	North	**Date:**	June 14, 2017
Photographer:	Paul Prys, Tetra Tech	**Witness:**	None

Subject: Perimeter air sampling was conducted by a Tetra Tech START, State of North Carolina-accredited air monitor to evaluate the effectiveness of engineering and safety controls in preventing off-site migration of asbestos fibers during removal activities at 315 and 319 Sloan Street.

OFFICIAL PHOTOGRAPH NO. 5
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number:	TT-01-071	**Location:**	Davidson Asbestos
Orientation:	Southeast	**Date:**	June 13, 2017
Photographer:	Paul Prys, Tetra Tech	**Witness:**	None

Subject: ER installed snow fencing along the subsurface of the excavated back yard of 319 Sloan Street after the visual inspection conducted by Tetra Tech START, State of North Carolina-accredited asbestos inspector and air monitor detected no visible ACM in the excavated area.

OFFICIAL PHOTOGRAPH NO. 6
U.S. ENVIRONMENTAL PROTECTION AGENCY

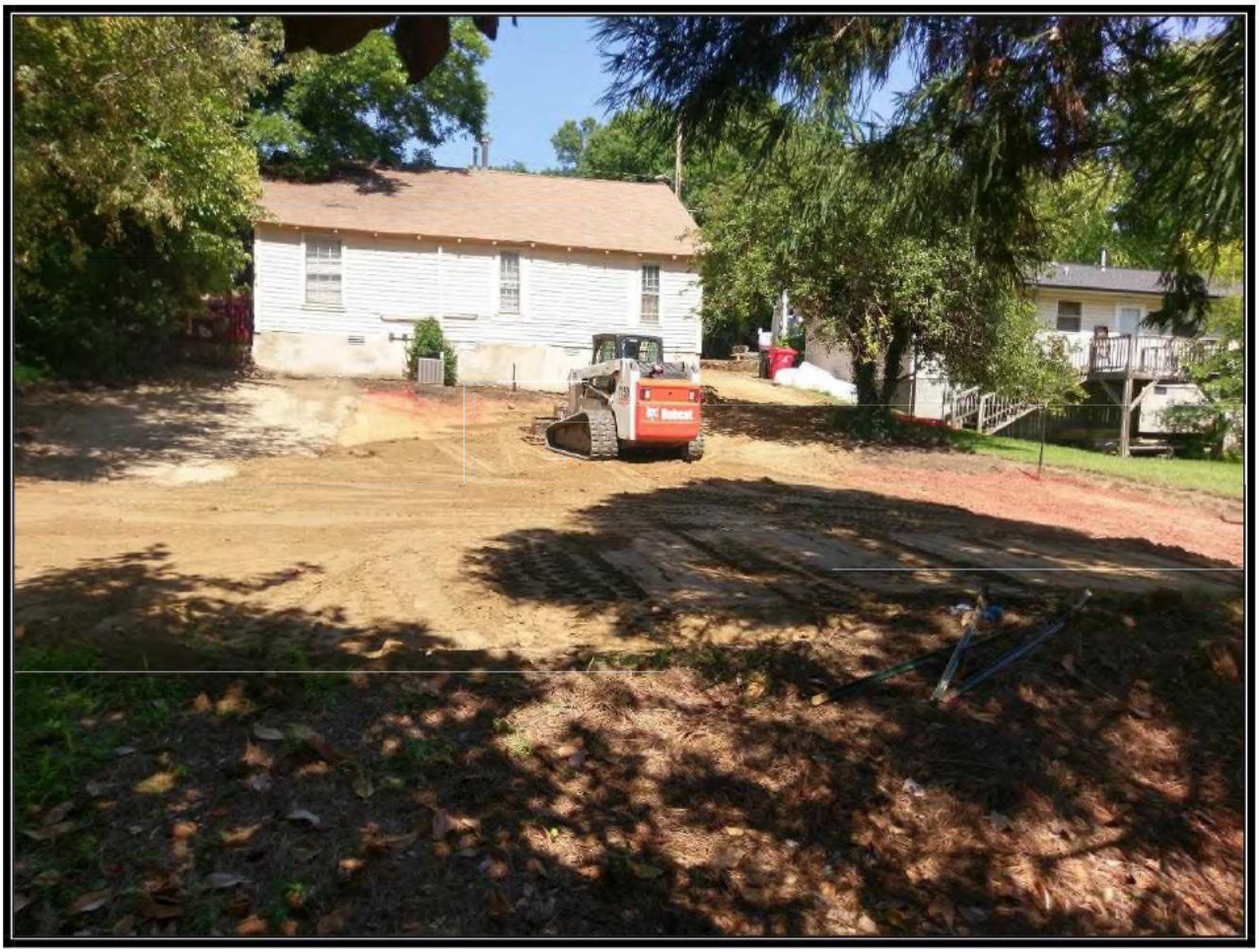
TDD Number:	TT-01-071	**Location:**	Davidson Asbestos
Orientation:	West	**Date:**	June 14, 2017
Photographer:	Paul Prys, Tetra Tech	**Witness:**	None

Subject: ER installed snow fencing along the subsurface of the excavated driveway of 319 Sloan Street after the visual inspection conducted by Tetra Tech START, State of North Carolina-accredited asbestos inspector and air monitor detected no visible ACM in the excavated area.

OFFICIAL PHOTOGRAPH NO. 7
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number:	TT-01-071	**Location:**	Davidson Asbestos
Orientation:	Not applicable	**Date:**	June 14, 2017
Photographer:	Paul Prys, Tetra Tech	**Witness:**	None

Subject: A Tetra Tech START, State of North Carolina-accredited asbestos inspector and air monitor visually inspected the excavated driveway of 315 Sloan Street for the presence of visible ACM. ER removed additional soil in the driveway to a depth of 24 inches, but ACM was visible along the sides of the excavation. Snow fencing was installed on the subsurface and along the sides of the excavated driveway to identify the depth of the excavation and the presence of ACM.

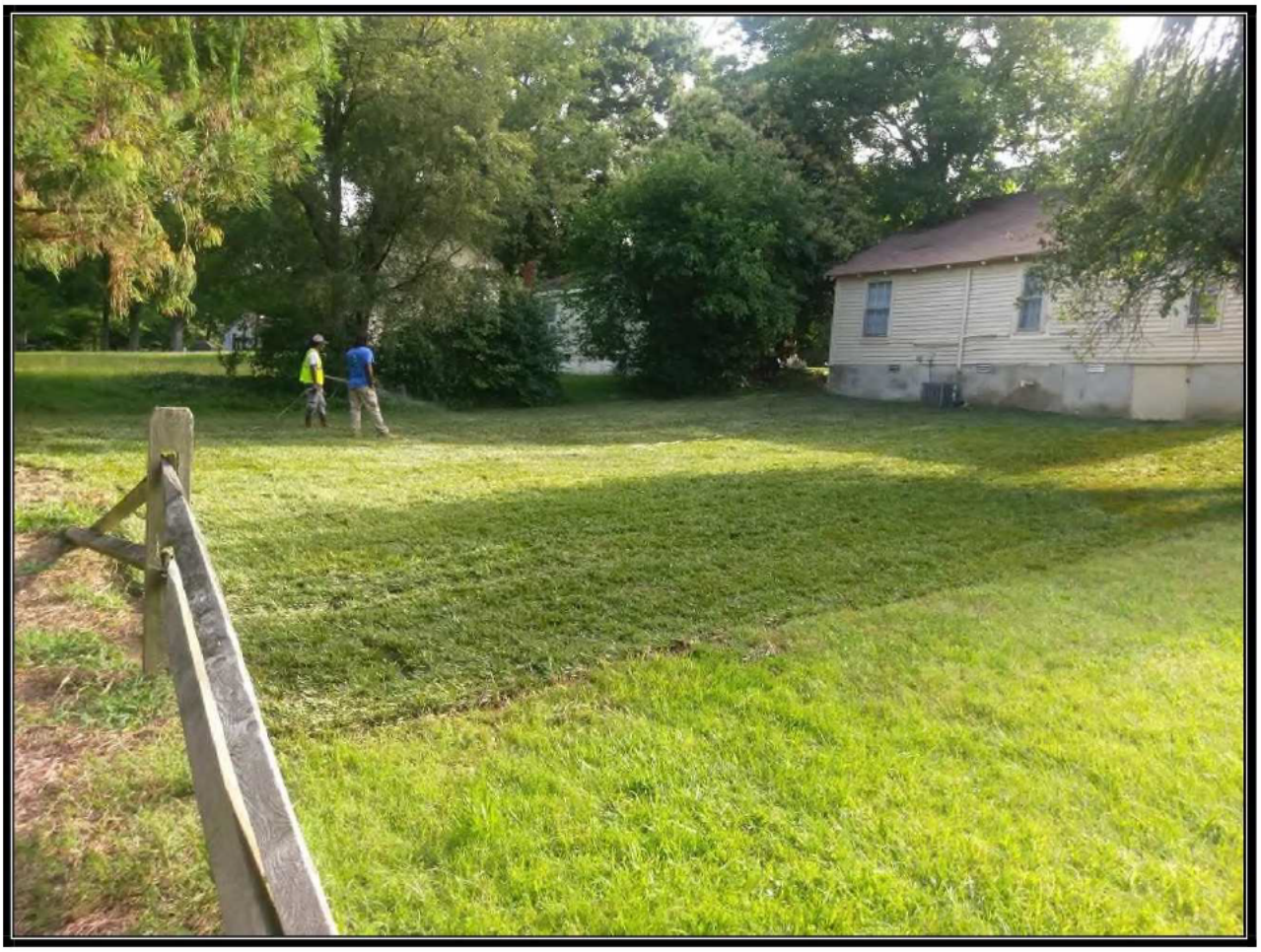


OFFICIAL PHOTOGRAPH NO. 8
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number:	TT-01-071	**Location:**	Davidson Asbestos
Orientation:	East	**Date:**	June 14, 2017
Photographer:	Paul Prys, Tetra Tech	**Witness:**	None
Subject:	ER used dump trucks and skid steers to install backfill in the excavated areas of 315 and 319 Sloan Street.		

OFFICIAL PHOTOGRAPH NO. 9
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number:	TT-01-071	**Location:**	Davidson Asbestos
Orientation:	Northeast	**Date:**	June 15, 2017
Photographer:	Paul Prys, Tetra Tech	**Witness:**	None
Subject:	ER used dump trucks, skid steers, and rakes to install topsoil in the excavated back yard of 319 Sloan Street.		



OFFICIAL PHOTOGRAPH NO. 10
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number:	TT-01-071	**Location:**	Davidson Asbestos
Orientation:	Northeast	**Date:**	June 16, 2017
Photographer:	Paul Prys, Tetra Tech	**Witness:**	None

Subject: ER installed sod in the excavated back yard of 319 Sloan Street after backfill and topsoil were installed.

OFFICIAL PHOTOGRAPH NO. 11
U.S. ENVIRONMENTAL PROTECTION AGENCY

TDD Number:	TT-01-071	**Location:**	Davidson Asbestos
Orientation:	Northwest	**Date:**	June 16, 2017
Photographer:	Paul Prys, Tetra Tech	**Witness:**	None
Subject:	ER installed rock in the excavated driveways at 315 and 319 Sloan Street after backfill was installed.		